

TABLE I-continued

| DRUG COMBINATIONS<br>(Tramadol:APAP) | TRAMADOL:APAP<br>DOSE (mg/kg, p.o.) |      |           | ED <sub>50</sub> 30 min (95% CI's) |                        |
|--------------------------------------|-------------------------------------|------|-----------|------------------------------------|------------------------|
|                                      | Tramadol                            | APAP | analgesia | Tramadol                           | APAP                   |
| APAP only                            | 0.5                                 | 800  | 30/30     | —                                  | 164.3<br>(122.7-219.9) |
|                                      | 0                                   | 30   | 2/15      |                                    |                        |
|                                      | 0                                   | 40   | 12/43     |                                    |                        |
|                                      | 0                                   | 50   | 1/15      |                                    |                        |
|                                      | 0                                   | 60   | 8/30      |                                    |                        |
|                                      | 0                                   | 80   | 23/60     |                                    |                        |
|                                      | 0                                   | 100  | 13/30     |                                    |                        |
|                                      | 0                                   | 120  | 13/30     |                                    |                        |
|                                      | 0                                   | 160  | 10/30     |                                    |                        |
|                                      | 0                                   | 200  | 13/25     |                                    |                        |
|                                      | 0                                   | 240  | 14/25     |                                    |                        |
|                                      | 0                                   | 400  | 12/15     |                                    |                        |
|                                      | 0                                   | 800  | 13/15     |                                    |                        |

We claim:

1. A pharmaceutical composition comprising a tramadol material and acetaminophen, wherein the ratio of the tramadol material to acetaminophen is a weight ratio from about 1:1 to about 1:1600.
2. The pharmaceutical composition of claim 1 wherein the tramadol material is tramadol hydrochloride.
3. The pharmaceutical composition of claim 2 wherein the tramadol hydrochloride is racemic.
4. The pharmaceutical composition of claim 1 wherein the weight ratio is about 1:1.
5. The pharmaceutical composition of claim 1 wherein the weight ratio is from about 1:5 to about 1:1600.
6. The pharmaceutical composition of claim 5 wherein the weight ratio is about 1:5.
7. The pharmaceutical composition of claim 5 wherein the weight ratio is from about 1:19 to about 1:800.
8. The pharmaceutical composition of claim 7 wherein the weight ratio is from about 1:19 to about 1:50.
9. The pharmaceutical composition of claim 1 further comprising a pharmaceutically acceptable carrier.
10. The pharmaceutical composition of claim 1 further comprising a decongestant or bronchodilator.
11. The pharmaceutical composition of claim 1 further comprising an antitussive.
12. The pharmaceutical composition of claim 1 further comprising an antihistamine or a non-sedating antihistamine.
13. The pharmaceutical composition of claim 1 further comprising a muscle relaxant.
14. The pharmaceutical composition of claim 1 further comprising a sleep aid.
15. A method for treating a pain in a mammal comprising an administration to the mammal an effective amount of the pharmaceutical composition of claim 1.

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